
DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003-NE-29-AD; Amendment 39-13300; AD 2003-18-09]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce plc Trent 768-60, Trent 772-60, and Trent 772B-60 Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Rolls-Royce plc (RR) Trent 768-60, Trent 772-60, and Trent 772B-60 turbofan engines. This AD requires removal from service of certain part numbers of high pressure (HP) compressor rotor shafts, based on a newly established reduced life limit. This AD is prompted by reports of HP compressor drums with small cracks in blade loading slots found at overhaul inspection. The HP compressor drums are an integral part of the HP compressor rotor shaft. We are issuing this AD to prevent possible uncontained HP compressor drum failure, which could result in damage to the airplane.

DATES: Effective September 24, 2003.

We must receive any comments on this AD by November 10, 2003.

ADDRESSES: Use one of the following addresses to submit comments on this AD:

- By mail: The Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-NE-29-AD, 12 New England Executive Park, Burlington, MA 01803-5299.
- By fax: (781) 238-7055.
- By e-mail: 9-ane-adcomment@faa.gov. You may examine the AD docket at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

FOR FURTHER INFORMATION CONTACT: James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7176; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: The Civil Aviation Authority, (CAA), which is the airworthiness authority for the U.K., recently notified the FAA that an unsafe condition may exist on Rolls-Royce plc Trent 768-60, Trent 772-60, and Trent 772B-60 turbofan engines. The CAA advises

that it has received overhaul inspection reports of HP compressor drums with small cracks in blade loading slots. The HP compressor drums are an integral part of the HP compressor rotor shaft. The manufacturer is currently analyzing parts from the field, and has not yet determined the root cause of the cracking or established a full understanding of the crack propagation rate. Through coordination with the CAA, the manufacturer has reduced the declared lives of the affected HP compressor rotor shafts to 4,200 cycles-since-new (CSN). The FAA has confirmed through the CAA that there are no affected in-service parts close to accumulating 4,200 CSN. The manufacturer may introduce a design change to increase the declared lives of HP compressor rotor shafts in the future.

FAA's Determination and Requirements of This AD

Although none of these affected engine models are used on any airplanes registered in the United States, the possibility exists that the engine models could be used on airplanes that are registered in the United States in the future. Since an unsafe condition has been identified that is likely to exist or develop on other Rolls-Royce plc Trent 768-60, Trent 772-60, and Trent 772B-60 turbofan engines of the same type design, we are issuing this AD to prevent possible uncontained HP compressor drum failure, which could result in damage to the airplane. The HP compressor drums are an integral part of the HP compressor rotor shaft. This AD requires removal from service of certain part numbers of HP compressor rotor shafts, based on a newly established reduced life limit of 4,200 CSN.

Bilateral Airworthiness Agreement

This engine model is manufactured in the U.K., and is type certificated for operation in the United States under section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. In keeping with this bilateral airworthiness agreement, the CAA has kept the FAA informed of the situation described above. We have examined the findings of the CAA, reviewed all available information, and determined that we need to issue an AD for products of this type design that are certificated for operation in the United States.

FAA's Determination of the Effective Date

Since there are currently no domestic operators of this engine model, notice and opportunity for public comment before issuing this AD are unnecessary. Therefore, we can adopt this regulation immediately.

Changes to 14 CFR Part 39—Effect on the AD

On July 10, 2002, we issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs our AD system. This regulation now includes material that relates to special flight permits, alternative methods of compliance, and altered products. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "AD Docket No. 2003-NE-29-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it; we will date-stamp your postcard and mail it back to you. We specifically invite comments on the overall regulatory, economic, environmental, and

energy aspects of the rule that might suggest a need to modify it. If a person contacts us verbally, and that contact relates to a substantive part of this AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We are reviewing the writing style we currently use in regulatory documents. We are interested in your comments on whether the style of this document is clear, and your suggestions to improve the clarity of our communications with you. You may get more information about plain language at <http://www.faa.gov/language> and <http://www.plainlanguage.gov>.

Examining the AD Docket

You may examine the AD Docket (including any comments), between 8:00 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays. See ADDRESSES for the location.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES. Include "AD Docket No. 2003-NE-29-AD" in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2003-18-09 Rolls-Royce plc: Amendment 39-13300. Docket No. 2003-NE-29-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective September 24, 2003.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Rolls-Royce plc (RR) Trent 768-60, Trent 772-60, and Trent 772B-60 turbofan engines. These engines are installed on, but not limited to Airbus A330 series airplanes.

Unsafe Condition

- (d) This AD is prompted by reports of high pressure (HP) compressor drums with small cracks in blade loading slots found at overhaul inspection. We are issuing this AD to prevent possible uncontained HP compressor drum failure, which could result in damage to the airplane.

Compliance

- (e) You are responsible for having the actions required by this AD performed within the compliance cycles specified unless the actions have already been done.

(f) Remove HP compressor rotor shafts, part numbers (P/Ns) FK24031 (pre RR Service Bulletin (SB) RB.211-72-B172), FK22745 (SB RB.211-72-B172), FK23313 (SB RB.211-72-B261 and pre SB RB.211-72-B653), FK25502 (SB RB.211-72-B653), FK26185 (SB RB.211-72-B921), FK32129 (SB RB.211-72-C746), FW20195 (SB RB.211-72-D533), FW20196 (SB RB.211-72-D533), FW20197 (SB RB.211-72-D533), and FW20638 (SB RB.211-72-D533) from service at or before accumulating 4,200 cycles-since-new (CSN).

(g) After the effective date of this AD, do not install any HP compressor rotor shaft, P/Ns FK24031 (pre RR SB RB.211-72-B172), FK22745 (SB RB.211-72-B172), FK23313 (SB RB.211-72-B261 and pre SB RB.211-72-B653), FK25502 (SB RB.211-72-B653), FK26185 (SB RB.211-72-B921), FK32129 (SB RB.211-72-C746), FW20195 (SB RB.211-72-D533), FW20196 (SB RB.211-72-D533), FW20197 (SB RB.211-72-D533), or FW20638 (SB RB.211-72-D533), that exceeds 4,200 CSN.

Alternative Methods of Compliance

(h) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Material Incorporated by Reference

(i) None.

Related Information

(j) CAA airworthiness directive 003-12-2001, dated February 26, 2002, and Rolls-Royce plc Mandatory Service Bulletin No. RB.211-72-D586, Revision 1, dated February 26, 2002, also address the subject of this AD.

Issued in Burlington, Massachusetts, on September 3, 2003.

Marc J. Bouthillier,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 03-22888 Filed 9-8-03; 8:45 am]

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